## What is claimed is:

- 1. A three-dimensionally networked silica composed of silica particles of 0 to 100 nm combining by bridge chains of C<sub>1</sub>~C<sub>6</sub> alkyl, polyimine, peptide, and polyether groups.
- 2. A three-dimensionally networked silica according to claim 1, wherein the length of bridge chains is ranged in 0.5 to 100 nm.
- 3. A three-dimensionally networked silica according to claim 1, wherein the content of bridged chains per silica is ranged in 0.1 to 1.5 mmol/g.
- 4. (Deleted)
- 5. A three-dimensionally networked silica according to claim 1, wherein silica particles are combined by reacting silane-coupled silica particles coupled with trialkoxy silane having an amine substituent and another silica particles coupled with trialkoxy silane having a glycidyl substituent.
- 6. A three-dimensionally networked silica according to claim 5, wherein the reacting pairs are amine and chloride, glycidyl and mercapto, glycidyl and hydroxyl, and amine and mercapto groups.
- 7. (Deleted)
- 8. A three-dimensionally networked silica according to claim 5, wherein the silane having an amine substituent is 3-aminopropyltriethoxy silane and the silane having a glycidyl substituent is 3-glycidoxypropyltrimethoxy silane.
- 9. A three-dimensionally networked silica according to claim 5, wherein the silane having an amine substituent is 3-aminopropyltriethoxy silane and the

- silane having a chloride substituent is 3-chloropropyltriethoxy silane.
- 10. A three-dimensionally networked silica according to claim 5, wherein the silane having a mercapto substituent is 3-mercaptopropyltriethoxy silane and the silane having a chloride substituent is 3-chloropropyltriethoxy silane.
- 11. A three-dimensionally networked silica according to claim 5, wherein the silane having a mercapto substituent is 3-mercaptopropyltriethoxy silane and the silane having a glycidyl substituent is 3-glycidoxypropyltirethoxy silane.
- 12. A three-dimensionally networked silica according to claim 1, wherein silica particles are combined by reacting silane-coupled silica particles with connecting materials with multifunctional groups on their ends in toluene by refluxing.
- 13. A three-dimensionally networked silica according to claim 12, wherein the connecting materials are diamines, dichlorides, diisocynates and dicarboxylic acids with methylene chains of  $C_6$ - $C_{100}$ .
- 14. (Deleted)
- 15. A three-dimensionally networked silica according to claim 12, wherein connecting materials are disocyanato having methylene chains of C<sub>6</sub>-C<sub>100</sub>.
- 16. A three-dimensionally networked silica according to claim 12, wherein the silane having an amine substituent is 3-aminopropyltriethoxy silane and the connecting material is dichloro, dibromo or diiodoalkane with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.
- 17. A three-dimensionally networked silica according to claim 12, wherein the

- silane having an mercapto substituent is 3-mercaptopropyltrimethoxy silane and the connecting material is dichloro, dibromo or diiodoalkane with the methylene skeletal of  $C_6$ - $C_{40}$ .
- 18. A three-dimensionally networked silica according to claim 12, wherein the silane having a glycidyl substituent is 3-glycidoxypropyltrimethoxy silane and the connecting material is diamino or diisocynato alkane with the methylene skeletal of C<sub>6</sub>-C<sub>40</sub>.
- 19. A three-dimensionally networked silica according to claim 12, wherein the silane having a glycidyl substituent is 3-glycidoxypropyltrimethoxy silane and the connecting material is polyethyleneimine with molecular weight 600-30,000.
- 20. A three-dimensionally networked silica according to claim 19, wherein the skeletal of connecting materials is polyether of C<sub>6</sub>-C<sub>50</sub>.
- 21. A three-dimensionally networked silica according to claim 1, wherein silica particles are combined by reacting, silica particles are directly reacting multifunctional connecting materials in toluene by refluxing.
- 22. A three-dimensionally networked silica according to claim 21, wherein the multifunctional connecting materials are dichlorides with the methylene skeletal of  $C_6$ - $C_{40}$ .
- 23. A three-dimensionally networked silica according to claim 21, wherein the multifunctional connecting materials are diisocyanates with the methylene skeletal of  $C_6$ - $C_{40}$ .

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